

CANADIAN NIAGARA POWER LEAGUE  
MEETING

1897

SPCL  
FC  
3160  
.123  
C35C3  
1897



258935





CANADIAN

Niagara Power League

Meeting,

---



TOWN HALL,

Niagara Falls, Ont.

MONDAY EVENING,

December 13th,

1897.





# CANADIAN Niagara Power League Meeting.

NIAGARA FALLS, ONT.

December 13th, 1897.



**Remarks of Mr. William B. Rankine, Secretary of the Canadian Niagara Power Company.**

Mr. W. B. Rankine, Secretary of the Canadian Niagara Power Company then said:—Mr. Mayor and Gentlemen, I should be very much obliged if, before I have the pleasure of addressing the meeting, you will call upon the other companies which are mentioned in this petition which has been presented. The first one mentioned is the Canadian Power Company which asks for the privilege of discharging water from Chippawa Creek across or under the park, and secondly the company which asks the privilege of developing power on the lower river, Mr. Slater's project. I would like to hear from Mr. Slater in the regular order and then I shall be glad to address the meeting.

By Mr. Slater.—I have no objection to letting Mr. Rankine have an opportunity to answer anything I may say. I am sure this town will be glad to listen to him after I have got through. It is only right that he, representing one of the largest companies in the world, should be the first to address you in this meeting. The project which I unfortunately have suggested to the people of this country is for the interest of the people, and if Mr. Rankine's company is in a position to go ahead with this work I am glad of it. Mr. Rankine has said he has something to communicate to you and so he should be the first speaker and if I say anything he takes objection to, the audience will gladly listen to any reply Mr. Rankine may make to anything I have said.

By the Chairman.—I guess we will have to hear from Mr. Rankine first.

By Mr. Rankine.—I did not ask for the delay because I felt that I would be unable to answer everything Mr. Slater may say, but because I had not heard of the project which he represents and I wished to hear about it before addressing you. I know something about the other project, and I



will not take your time any longer than necessary to explain about the project which I represent, but I am sorry I cannot hear Mr. Slater first.

When I first heard of the organization of the Canadian Power League I telephoned my friend Mr. Hill and asked about it. I said, if the good people of Canada and the Province of Ontario are going to organize a power league or a league to promote the development of power upon the Canadian side, I wish to be in it. For five years I have had a good deal to do with the consideration and work connected with the first stages of the proposed development upon the Canadian side, to say nothing of what my connection has been with the power development upon the American side. Mr. Hill very kindly stated that after they had their organization complete they would be glad to have me come over to address the league. A short time passed and I became alarmed. Not that I had not heard from him, but I heard that the Canadian Power League had been organized and had been officered and it was said that Mr. Macklem of Chippewa, as a land owner largely interested in Mr. Denniston's Canadian Power Company and who had made contracts with its promoters, was President, and that my friend Mr. Hill who I understood was acting as attorney for some of the parties interested, was Secretary, and that on the executive board or committee could be found others closely identified with the same Canadian Power Company and its land attachment. I concluded not to be frightened by that, because while men who have professional relations or other relations with the company which is trying to develop power there, would be interested in helping along that development, I knew that when I came over here and found those gentlemen in the saddle and the Canadian Power League in the field, I could expect fair treatment, as fair treatment as would be given to any American appearing here, and particularly when the Canadian Power Company was supposed to be controlled by two other Americans—Messrs. Denniston and Paine. So I got over that fear and I know that I made no mistake. Then I began to read the papers particularly the Toronto papers, which have been very interesting lately. I also read THE REVIEW and the RECORD of your town. I found this clipping in the Toronto World, being a despatch from Niagara Falls, Ont., dated Dec. 11th. which I will read to you.

Niagara Falls, Dec. 11th.

In the City election there is but one great issue before the people and that is the Power Question. No man stands the least chance of even a nomination until he has declared himself. He must oppose the Canadian Niagara Power Company, which is practically the Niagara Falls Power Company, and tell every man he meets that he is for power developed by Canadians for Canadians. Excitement is running very high on this question, but little else is talked of."

That was enough to frighten an American, particularly a representative of the Canadian Niagara Power Company. But I remembered that even on our side everything you read in the papers is not true, and that I ought to get very handsome treatment from a Canadian Power League, even if this town meeting were made up almost entirely of candidates who were looking for nominations. I have seen one or two here who have been nominated, but I felt that I could come over and ask you as business men, members of the League and friends of this League, which, as Mr. Hill says has been organized for the purpose of encouraging the development of Canadian power, to listen to a few remarks upon a business subject.

I must be a little historical and I hope you will bear with me, because in



order to explain exactly our situation it will be necessary for you to know first what the Canadian Niagara Power Co. has done. Then I am going on to tell you what it is doing; and then what it is going to do. You will naturally be most interested in the last but you must bear with me through the first stages in order that you may pass intelligent criticism on the situation of to-day. In 1891, after four or five years of hard preliminary work upon the American side, capital was secured for the development of power on that side by the Niagara Falls Power Co. I had had part in all that preliminary work and was familiar with its difficulties. When the capital was secured, the directors of the company found that they had great novel problems to deal with. Some people thought there was nothing to be done there outside of digging a tunnel and taking the water from the river. That had been done before.

Not that there is anything difficult about developing power where you have two levels and where you can discharge your water after you have passed it through the wheels. But to develop this power at Niagara economically it was necessary to construct hydraulic and electrical machinery the like of which had never been built before, and the smallest units which could be used economically under that head of water were units of 5,000 horse power. We went to the American manufacturers of turbines who said 'We will give you American No. 4,—that is to say; 1250 horse power,—or give you Victor No. 3, but not 5000 horsepower wheels. We went to the American manufacturers of dynamos and they said, "We can give you a 1250 horsepower dynamo, but nowhere in this country, nor in the United States, have there been made any 5000 horse power units." It was experimental and we began to scour the world for advice in regard to it. We organized an International commission, which was presided over by Sir William Thompson, now Lord Kelvin. We had experts from different countries to pass upon each step; we invited competition. But the years went on. We had full knowledge of the criticisms because we had not commenced work, and we can appreciate your feelings. It is not natural to be patient under such delays. But in 1892 while all this work was going on on the other side, getting plans made, trying to get manufacturers who would make the machines, the directors of the Power Company on the American side said; "Now, when we get this machinery, there should be no question about the continuity of the supply of power. We cannot expect to get a revenue from the money that we put in here ordinarily for a great many years and we must depend upon long distance transmission to Buffalo, which is 26 miles off, and we must be sure, for we wish to be able to meet our interest and fixed charges on our investment." They were right about needing the revenue from long distance transmission. The results proved that. They said: "There can be produced upon the Canadian side similar development for local use and transmission throughout Ontario, and in order that these two developments may go on in harmony, that one may help the other with the experience gained, that the experience gained here may be used on the other side and that the two power houses may be tied up together by cables, so that if a breakdown occurs on one side, on the Horseshoe or on the American fall, the other one can be used as a reserve and in that way secure continuous and reliable power, and that is the only power which you can induce street railroad companies and lighting companies to take, the only power you can get electrolytic companies to take. We shall look at Canada." So they began to look around on

the Canadian side and they found in existence a charter of a Canadian Power Company which was at that time controlled in Toronto. It provided for taking power from the Welland River, leading it up through a long canal and discharging it at some point, I think at that time below the Park, although the charter has since been modified to allow the discharge at a point in the Park subject to the consent of the Provincial authorities. That charter was examined and the plans were examined and they were submitted to engineers and it was decided, although it was offered for sale at a very reasonable price, that it was not a development such as had been contemplated as best on the American side; it was not capable of extension and enlargement to meet whatever demands might come in the future. It had other objections to it to which I need not refer at this time. It is sufficient to say that the men who were trying to get a charter which would be practical for developing the Canadian power in a large way, who had the means to develop it and who had the best scientific advice they could get, were advised not to take the Canadian Power Company's charter and they did not take it. They then found that there was in existence an agreement between the Commissioners of the Park and some English gentleman who had an American associate by the name of Col. Shaw, which gave them the right to develop power. That plan contemplated taking water at the head of Cedar Island within the Park, leading it by canal to a wheel pit situate below the high bank beneath the Falls View station and through the wheels, discharging the water by tunnel into the river below. That agreement was considered and it was found that it was about to expire and that the government was unwilling to extend it unless substantial payments were made. Some money had been paid by the English gentlemen who were interested—Lord Wantage and Col. Lake. Electricians of the Niagara Falls Power Co. considered the project, the engineers examined the plans, and it was decided that it was a development which could be made, which would be commensurate with the requirements of the situation and take care of any demands which might come upon the company for power from Toronto, Hamilton or from any other place to which it might afterwards be deemed advisable to transmit the same, and at the same time fully take care of the local demand carried out on the lines of the construction on the American side. An arrangement was made with the Government by which the Commissioners entered into a lease with a company to be known as the Canadian Niagara Power Company, of which I am secretary, under which credit was given for the money already paid by our English associates and an annual payment after a certain time of \$25,000 a year provided, the construction of the work to begin May 1st, 1897, and to be so far completed by Nov. 1st, 1898, that there should be water connections for 25,000 horsepower developed, and electricity ready for transmission to the extent of 10,000 horsepower.

Why was that date of May 1, 1897 fixed? This was in 1892 when the agreement was made. Ground had been broken upon the American side and the plans had been adopted there for the development of power on that side, and yet the Ontario Government with knowledge of that fact, after a careful consideration of the whole question, fixed the date of the commencement of development on this side as May 1st, 1897. Sir Oliver Mowat, who at that time was Attorney-General, after looking the whole mat-

ter over and after having had presented to him the plans which were to be adopted on the American side, said to us in substance:—"Gentlemen, I recognize that you cannot conduct two experiments on different sides of the river at the same time. You are to commence on one side to develop and find out what you can do and what is the best way in which to do it; then the other side will get the benefit of that experience. Do you think you can be ready within five years to commence that work upon the Canadian side?—Meanwhile we were to pay the rent. We said we thought we could be ready; that we could not expect to get on the Canadian side for some time the same amount of development which we might expect on the American side at first, because there were more manufacturers there. We must again look to long distance transmission to help us out and that we would have the Buffalo experience with a transmission of 26 miles, before we attempted 40 miles to Hamilton or 90 miles to Toronto by land. The agreement was made and confirmed by Parliament. Acting on the good faith of that agreement, the company paid \$25,000 a year and has continued to pay \$25,000 a year until the present time.

I know that the rent has been paid, but during this period of paying rent we had unexpected delays in our American work. In the first place, after our tunnel had been started. We had been told it could be built without lining. We found we had to line it at an unexpected cost of about \$400,000. When we came to dig the wheel pits, it took a year beyond the contracted time on account of difficulties growing out of the quantity of water flowing through the fissures in the rock. Then it came to our hydraulic and electrical machines—for meanwhile we had been working at our machinery. Under advice of all of the engineers, we had our turbines designed in Switzerland—we couldn't get them in our country, and expended a great deal of money for those particular plans. We found that our dynamos could not be delivered when we expected delivery; that the delivery would be delayed one year and a half, and while nobody had ever made a 5000 horsepower turbine or dynamo before, somebody had to be a pioneer and suffer, and we were the victims.

Meanwhile we had considered transmission to Buffalo. We had been discouraged about it and we had been encouraged. We got our dynamos one year and a half late, so that last winter we delivered 1,000 horse power to Buffalo, to the Buffalo Street Railroad over our wires intended for the transmission of 5,000 horse power. It worked all right, but we had interruption. All new things meet with difficulties, but it was on the whole successful. However, we cannot tell as yet what our transmission troubles and losses are until we have operated that line for a winter with its full capacity. It is not fair to estimate the loss on transmitting 5,000 horsepower by the loss in transmission of 1,000 horsepower on a 5,000 horse cable. We are now delivering 2,500 horsepower there, and after the first of the year we are to deliver 10,000 horsepower and to gain the experience of all the climatic difficulties in transmitting such a current through the air on bare wires in winter time.

But May 1st, 1897, was coming around. We had not this experience and we had to commence work under our Canadian charter. We thought in view of the facts that it would be very wise for us to have the experience of transmitting 10,000 horsepower to Buffalo before we undertook work upon the Canadian side. There might be necessary changes in the dynamos themselves, and we asked the Commissioners for a short extension. Then



a great shock came to us early in the year 1897, which more strongly determined us at that time to urge our request for an extension and to hesitate before commencing that work on May 1st, 1897, on this side. We have not been able to talk about it much before. We did not advertise it to the world, and we did not wish our American friends to know about this until we could tell them that we had applied the remedy. I tell you that the courage of ignorance and the courage of experience are about the same when talking about developing power, but when it comes to getting capital, capital will never lead the courage of ignorance and it is sometimes hard to get it to follow even the courage of experience. Now prior to May, 1897, I went to Toronto and I saw the Premier, having first seen the commissioners, and I told him we did not feel we ought to commence that work on the Canadian side May 1st, 1897. We had supposed five years would have been plenty of time, but we had not been able to get our operating and transmission experiences fully, and now we had this other surprise. I did not tell that to the meetings held throughout the Province at that time; I could not as a business matter disclose that, but the fact was that early in 1897, three months before the time when we were expected to begin our work on the Canadian side, we discovered that the walls of our wheel-pit were beginning to come together. We had built a long slot there and we placed in that slot three of the wheels that were to develop 15,000 horsepower, and we were going on extending that slot, putting in additional wheels in a row, as the engineers advised, and the same construction which had been adopted in the plans for the Canadian side. All at once in that slot, extending down practically all the 400 feet, the walls began to creep, threatening our plant, and I assure you it was a very creepy time for us. I told Mr. Premier Hardy that we could not make this public, but that he was entitled to know what was going on there, and until we knew where this surprise was going to land us, we could not build a similar slot on the Canadian side in that location. Of course we might find better rock, but we might find worse rock, but we wanted to know the condition to be encountered, the character of the rock, and the effect caused by the cutting of a slot that length and depth. We did not see how we could go on without an extension in the interests of the Canadian Company. We asked 18 months. We were then being opposed by the Canadian Power Company and we did not get the extension. Mr. Paine of that company, came to me and said: "We have this charter. You can have a canal from the Welland river and you won't have any trouble from anchor ice as you will have in your plan, and there are a great many advantages connected with it, and land, which you ought to consider and you ought to consolidate." I said to the gentleman, "We do not wish to consolidate. We examined that charter five years ago, and we don't think there is anything to consolidate with that is worth consolidating. Your plan may be all right and we may be mistaken, but our engineers tell us that it is not the best plan for developing power on the Canadian side and we don't want the charter." Mr. Paine said: "Very well, then we must fight you; we will fight your extension. If you will consent to some sort of an arrangement by which these two charters can be worked into one another or run together, or you can have an interest in our 2,000 tract, then you can get your extension, otherwise you cannot." And the first thing I knew there were meetings being held in Hamilton

Chippawa,\* Welland and other places and resolutions passed denouncing the Canadian Niagara Power Co. as acting in bad faith because it had asked an extension and recommending the taking away of its charter because it was acting in bad faith. We had already paid the government \$100,000 and we had gone on and done our best to find out all we could about this plan of developing Niagara power so that when we took it up on the Canadian side as we intended to do and never have ceased for one moment to intend to do--we would adopt the best method that could be adopted for developing power as shown by our experience. We told the Canadian Power Co. promoters that we couldn't make a consolidation, and we didn't get the extension and we had to keep quiet and take all the abuse that we got. On the 1st day of May we commenced work as we were bound to do, and we were asked by the Canada Southern Railroad to move our power house a little farther to the south to get out of the way of their view from the Falls View station. After we made this start and made this change we were accused of having turned a few shovelfulls of earth and not having done anything. We had to take that criticism. That creeping of the rock stopped on the 15th of August and the only reason I dare to speak of it now is that it has never crept since and we have completely stopped it. We then sent for Prof. Unwin of London, who had made our plans for the Canadian works, We took him to the American side and showed him the situation and asked him if he still advised us to put down that slot in that form, which was the most economical way to develop power and he said Yes, with certain revisions and changes. He also advised us to consider the use of different types of turbine wheels designed in Switzerland. He and our hydraulic engineer, Mr. Herschel, have been to Switzerland in our behalf and are busy working out the plans for our Canadian works. We have been getting estimates. We have made new cross sections and are arranging all of our plans and estimates, and we are going to be in a position shortly where we can make a definite statement to you. I am not going to tell you a definite date now. These things go slowly. We are accused of being in default, but I tell you this, we are working, we are going to the government with a definite plan which we believe will bring about this development of power under our plan on the Canadian side in a manner which will be for the best interests of this province, and will take care of local demands for power, with the idea of carrying it even to Toronto. We have not yet got cable manufacturers who will agree to give us a cable to take it under the lake to Toronto, but they are working at it, for it is 90 miles around by land. All these things are being studied and settled, and we are getting proposals. That is what we have been doing and what we are going to do.

In the meantime we said to the government, three years ago, that it was very evident that we were behind hand on the American side and we had hoped to begin before 1897 on the Canadian side. There was a cry for power there, so we asked the government to let us make an arrangement with the Park Railroad Co by which we could deliver their surplus power to take care of the local demand to the extent which it will be used and on practically any terms to please the Government. It was not the money in it but to show that we could do something, that we are ready to do something to supply power. We were ready to spend money and put in an electrical plant and we did not ask for an extension of our charter as a condition of that agreement. We expressly agreed that the agreement between the Railroad Co. and ourselves and

the government should not be considered an extension of time and we did not ask to stop the payment of rent, but to show to these gentlemen on the Canadian side that there was some power ready for use. We know how patient they have been. Well for three years we tried to get that agreement, and we got it last week. Three days after we got it, we let the contract for the first installation of electrical machinery which will produce 1000 horse power and we are ready this week to deliver three to five hundred horse power of the current which is generated by the present machinery in the railroad power house. That power is available and it can be had now by anybody who wants it, at a lower price than is paid for the same amount of power upon the American side. This price can be obtained at our office here, where we are ready to answer all questions. We are ready to run the power from the railway power house to this end or to the other end of the town and it can be taken from the wires here or at Chippawa, and it is going to be delivered wherever it is wanted, within the limits of the agreement. We have no interest in any acre of land as against any other acre where a manufacturer desires to locate. Remember we have three to five hundred horse power ready for delivery now and you can find out about it in our office in the Hewson block. We will have 1000 horse power ready in four months in addition, and Mr. Phillips of the railway, assures us that that development can be increased to 5000 H.P. But that is not intended to take the place of the proposed larger development in any way. Your Hon. Member of Parliament, Mr. German, in the House yesterday asked the question, 'Has any agreement been entered into between the Canadian Niagara Power Co., the Niagara Falls Park & River Ry Co., and the Commissioners for the Queen Victoria N. F. Park, with reference to the use by said railway of hydraulic power in excess of its present needs, for the purpose of working the railway, and the machinery necessary to operate and light the same.'

That question has been answered. There will be a copy of the agreement in our office and there is nothing in it we wish to conceal in any way. I shall be glad to answer any question in regard to it.

Now, I cannot close although I have taken a great deal of your time, without answering some of the statements in the letter from Mr. Denniston, which has been read by Sec. Hill. I read it this morning in the public prints. It is full of misstatements, and I think it is fair I should have an opportunity to answer them, on account of the more correct knowledge which I have been able to have through my connection with the Power Co. Mr. Denniston states these new electrolytic process industries on the American side have their chief markets abroad, and that Canada would have secured these industries in preference to the United States if Canadian power had been developed. I took the trouble to ask each one of these companies on our side and ascertain about their foreign trade. We have six of these companies now taking from us about 7000 H.P., for use in electrolytic purposes. The Aluminum Co. told me they had used last year about one third of their power to take care of the foreign market which now has fallen off rapidly because of a new manufactory started in Switzerland, and they said there would be no opportunity to use it on the Canadian side except for Canadian trade. I have tried to get them to come over here and establish a 1000 H. P. plant but have not succeeded as yet. The Carborundum Co. told me that their patents for furnishing carborundum for foreign use were owned abroad, and they therefore would manufacture in the United States for the de-



mand in the United States and manufacture in Canada for the demand there. The Electro-Chemical Co. who make sodium, ship nothing whatever abroad. The Oldbury Electro-Chemical Works ship nothing abroad. The Alkali Works ship nothing abroad. The Carbide Works manufacture under the Wilson patents, and cannot manufacture in Canada. Mr. Wilson, a Canadian, controls the carbide patents in Canada and manufactures at Merritton. Now, just one of these six ships abroad one third of its products and could perhaps manufacture that third in Canada, but will not. Mr. Denniston's statement is not accurate as to the other five. He complains of our Company as a great monopoly. On the American side we have the Schoellkopf Company in competition, and on this side we have Mr. Slater's project and Mr. Denniston's Company. He says that our so-called monopoly will not encourage Canadian power development, because power can be developed cheaper in Canada. It is surely to our interest to encourage manufacturing where we can produce the power cheapest because we can there make the most money. If that is in Canada, why should we not encourage it here? There is no philanthropy about it—it is business. You will notice that Mr. Denniston goes on and states that we have been in default for 13 months. May 1897, when we commenced work; it is six months since May. He says our plans are valueless anyway, because we have the anchor ice difficulty which must confront any company taking water from the rapids, "a difficulty pronounced by prominent engineers to be insuperable." We have only one thing to say to that and to Mr. Denniston. We had an opportunity to consolidate since 1892 up to 1896, with his Canadian Power Company and to try his plans. I wish he were here now to hear my correction of these inaccurate and misleading statements. He wrote me recently suggesting that we purchase the franchise of the Canadian Power Company. We did not purchase it. We did not purchase it five years ago and we saw no reason to change our minds about it and we didn't want to tie ourselves up to any particular land. We thought it better to take that money and put it into electrical machinery so that we might be able to give power to you at once, and we have done it.

I thank you again for the kind attention you have given me and I shall be glad to answer any question which may occur to you.







SPCL FC 3160.123 C35 C3 1897

C. 1



3 9157 00209682 7

Spc1

FC

3160

.123

C35C3

1897

**BROCK UNIVERSITY**

ST. CATHARINES, ONTARIO



**LIBRARY**

FOR USE IN SPECIAL COLLECTIONS ONLY

